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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yukihito Furuhashi

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EXAMINER

PHAM, MICHAEL

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2167

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/690,904

Applicant(s)

FURUHASHI ET AL.

Examiner

Michael D. Pham

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/26/07 has been entered.

Status of claims

2. Claims 1, 4-12 are pending.
3. Claims 1, 5, 11, and 12 have been amended.
4. Claims 1, 4-12 have been examined.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims ~~1, 4~~ 10 and 12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recite a system, which lacks memory and processor to execute the recited functions.

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to

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be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

From MPEP 2106.01:

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 4-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6892193 by Bolle et. al. (hereafter Bolle) further in view of U.S. Patent 7051277 by Kephart et. al. (hereafter Kephart).

Claim 1:

Bolle is directed to “a system in which various feature values possessed by a multimedia object are used to search for a similar object, comprising:

a feature value calculation section configured to calculate one or more types of feature values from the multimedia object which is to be registered” [col. 17 lines 59-65, feature vector(feature value) computation (calculation) step. Col. 32 lines 60-64, every media item which is entered into the database (to be registered) is first used as target media item and searched against a data structure of feature vectors that represent the reference media items in the database.];

“a category setting section configured to set a recommended category based on the feature value calculated by the feature value calculation section on a database storing the multimedia object” [Abstract, classifiers based on features for multimedia items. Col. 32 l. 60-67, Every media item which is entered into the database is first used as target media item and searched against a data structure of feature vectors (feature value) that represent the reference

media items in the database (based on feature value). This operation generates an index report of similar media items in the database. The media item to be entered into the database is stored along with similar media items, items of the same category (setting section configured to set a recommended category).].

“a registration section configured to associate the multimedia object which is to be registered” [col. 32 l. 60-64, every media item (multimedia object) which is entered into the database (to be registered) is first used as target media item and searched against a data structure of feature vectors that represent the reference media items in the database.],

“the feature value calculated by the feature value calculation section” [col. 17 lines 59-65, feature vector(feature value) computation (calculation) step.],

“said registration section registering the multimedia object”[classifiers used in the database, col. 32 lines 59-67], and

“feature value” “into the database” “[classifiers used in the database, col. 32 lines 59-67].

Bolle does not explicitly disclose “the recommended category being provided to a user as an initial value of a registration category in a form of category selection list in which a recommended category is pre-selected and a not-recommended category is not selected, for allowing the user to change the selection status of each category on the category selection list so as to determine the registration category of the multimedia object to be registered”, “the registration category determined by the user”, and “the registration category determined by the user into the database”.

On the other hand, since Kephart, abstract, discloses displaying, to the user, a representation of the one or more most likely categorical labels. Kephart further discloses discloses that these are a list of bestfolders, col. 8 line 34. Hence, because Kephart discloses that these lists of bestfolders (e.g. category selection list in which a recommended category is pre-selected and not recommended category is not selected), therefore Kephart suggests “the recommended category being provided to a user as an initial value of a registration category in a form of category selection list in which a recommended category is pre-selected and a not-recommended category is not selected”.

Because Kephart, abstract, discloses assisting a user with the task of categorizing a received electronic document into a collection and receiving data from the user, representative of a selected categorical label. Kephart further discloses, col. 8 lines 30-39, that the reader reads the message and data is received indicating that the user invoked the standard move to folder menu by clicking on the file button. That when this occurs the list best folders is prepended to the traditional alphabetic listing of folder names (i.e. user changes the selection status of each category on the category selection list). Kephart therefore suggests “allowing the user to change the selection status of each category on the category selection list so as to determine the registration category of the multimedia object to be registered”; “the registration category determined by the user”; and “the registration category determined by the user into the database”.

Kephart further states that the electronic document can include audio or video files (i.e. multimedia objects).

Both systems are directed to categorizing multimedia objects into a database. It would have been obvious to a person of an ordinary skill in the art to apply Kephart's disclosure of displaying to the user a representation of the one or more most likely categorical labels and receiving from the user representative of a selected categorical label to the system of Bolle for the purpose of improving upon the need to more precisely assign a topic to the classified media element as disclosed in Bolle, col. 31 lines 32-37 by allowing the user to selectively choose a category for the media object thereby categorizing it to tailor more specifically to the user rather than the system.

Claim 4:

Bolle and Kephart disclose the system according to claim 1. Bolle further discloses "wherein the category setting section selects a plurality of categories based on the feature value calculated by the feature value calculation section" [col. 26 lines 12-14, generating feature vectors $F(t)$ or $F(n)$ with the ultimate aim of dividing up a media stream into contiguous segments of one or more categories (selects plurality of categories based on feature vectors).]".

Kephart discloses "displays the plurality of selected categories in order of high accuracy" [Kephart, col. 4 lines. 55-56, presenting the set of possible labels to the user in a way that accentuates the most likely labels. Col. 7 lines 59-63, representations are preferably ordered such that the first element is the name of the folder deemed by the classifier to be most likely

destination.].

Claim 5:

Bolle as modified with Kephart discloses “wherein the category setting section displays the plurality of categories selected based on the feature value” [Bolle, abstract, categories selected based on feature value] “as a list of recommended categories indicating the categories having the accuracy which is not less than a set threshold value” [Kephart, col. 14 lines 14-16, bestfolders with any folders less than threshold removed] “, and a list of non-recommended categories indicating the categories having the accuracy which is less than the threshold value” [Kephart, col. 14 lines 10-12, list of bestfolders containing less than the threshold value].

Claim 6:

Bolle as modified with Kephart discloses “wherein the category setting section selects the category which is the registration end based on the feature value calculated by the feature value calculation section” [Bolle, abstract, categories based on features] “, and displays the selected category to which a symbol representing the accuracy is attached” [Kephart, figure 2, accuracy symbols attached to document].

Claim 7:

Bolle as modified with Kephart discloses “wherein the category setting section includes: a discriminate analysis section configured to discriminate/analyze the feature value of the

registered multimedia object with respect to the registration-end category” [Bolle, Col. 2 lines 40-49] “; and

a storage section configured to store a discriminate analysis result of the discriminate analysis section” [Bolle, Col. 32 lines 59-64, classifiers are stored. Since discriminate methods are essentially classifiers, they are stored.] “, wherein said category setting section uses the discriminate analysis result stored in the storage section to determine the category which is the registration end” [Bolle, Col. 2 lines 40-49].

Claim 8:

Bolle as modified with Kephart discloses “wherein the discriminate/analysis section discriminates/analyzes the feature value with respect to the registered objects including the multimedia object constituting the registration object, after the category setting section determines the registration end of the multimedia object” [Bolle, col. 34 lines 39-44, comparison of target stream and reference segments].

Claim 9:

Bolle as modified with Kephart discloses “an object designation section configured to designate an arbitrary multimedia object as the multimedia object which is the registration object” [Bolle, col. 14 lines 34-38classifies a media item in a collection] “; and

“an attribute designation section configured to carry out at least one of designation” [Bolle, abstract, categorization based on features] “and input of attribute information of the multimedia object designated by the object designation section” [Kephart, abstract, receiving

data from user representative of a selected categorical label.].

Claim 10:

Bolle as modified with Kephart discloses “wherein the category setting section includes an attribute designation section configured to carry out at least one of designation and input of attribute information of the multimedia object which is the registration object” [Bolle, Col. 33 lines 5-8].

Claim 11:

Bolle is directed to “a method in which various feature values possessed by a multimedia object are used to search for a similar object, comprising:

calculating one or more types of feature values from the multimedia object which is to be registered “ [col. 17 lines 59-65, feature vector(feature value) computation (calculation) step.

Col. 32 lines 60-64, every media item which is entered into the database (to be registered) is first used as target media item and searched against a data structure of feature vectors that represent the reference media items in the database.];

“setting a recommended category, which is based on the calculated feature value, on a database storing the multimedia object;” [Abstract, classifiers based on features for multimedia items. Col. 32 l. 60-67, Every media item which is entered into the database is first used as target media item and searched against a data structure of feature vectors (feature value) that represent the reference media items in the database (based on feature value). This operation generates an index report of similar media items in the database. The media item to be entered

into the database is stored along with similar media items, items of the same category (setting a recommended category).]

Bolle further discloses “associating with the multimedia object which is to be registered,” [col. 32 l. 60-64, every media item (multimedia object) which is entered into the database (to be registered) is first used as target media item and searched against a data structure of feature vectors that represent the reference media items in the database.] “the calculated feature value” [col. 17 lines 59-65, feature vector(feature value) computation (calculation) step.] “to register the multimedia object” and “the feature value” “into the database” “[Bolle classifiers used in the database, col. 32 lines 59-67].

Bolle does not explicitly disclose “presenting the recommended category as an initial value of a registration category in a form of category selection list which a recommended category is already selected and a not-recommended category is not selected, to a user for allowing the user to change the selection status of each category on the category selection list so as to determine the registration category of the multimedia object to be registered;” and “the registered category”

On the other hand, Kephart’s abstract discloses displaying, to the user, a representation of the one or more most likely categorical labels. Kephart further discloses that these are a list of bestfolders, col. 8 line 34. Hence, because Kephart discloses that these lists of bestfolders (e.g. category selection list in which a recommended category is pre-selected and not recommended

category is not selected), therefore Kephart suggests “presenting the recommended category as an initial value of a registration category in a form of category selection list which a recommended category is already selected and a not-recommended category is not selected”.

Because Kephart, abstract, discloses assisting a user with the task of categorizing a received electronic document into a collection and receiving data from the user, representative of a selected categorical label. Kephart further discloses, col. 8 lines 30-39, that the reader reads the message and data is received indicating that the user invoked the standard move to folder menu by clicking on the file button. That when this occurs the list best folders is prepended to the traditional alphabetic listing of folder names (i.e. user changes the selection status of each category on the category selection list). Kephart therefore suggests “allowing the user to change the selection status of each category on the category selection list so as to determine the registration category of the multimedia object to be registered”; and “the registered category”.

Kephart further states that the electronic document can include audio or video files (i.e. multimedia objects).

Both systems are directed to categorizing multimedia objects into a database. It would have been obvious to a person of an ordinary skill in the art to apply Kephart’s disclosure of displaying to the user a representation of the one or more most likely categorical labels and receiving from the user representative of a selected categorical label to the system of Bolle for the purpose of improving upon the need to more precisely assign a topic to the classified media

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element as disclosed in Bolle, col. 31 lines 32-37 by allowing the user to selectively choose a category for the media object thereby categorizing it to tailor more specifically to the user rather than the system.

Claim 12:

Bolle is directed to “a system in which various feature values possessed by a multimedia object are used to search for a similar object, comprising:

feature value calculation section means for calculating one or more types of feature values from the multimedia object which is to be registered” [col. 17 lines 59-65, feature vector(feature value) computation (calculation) step. Col. 32 lines 60-64, every media item which is entered into the database (to be registered) is first used as target media item and searched against a data structure of feature vectors that represent the reference media items in the database.];

“a category setting section means for setting a recommended category based on the feature value calculated by the feature value calculation means on a database storing the multimedia object” [Abstract, classifiers based on features for multimedia items. Col. 32 l. 60-67, Every media item which is entered into the database is first used as target media item and searched against a data structure of feature vectors (feature value) that represent the reference media items in the database (based on feature value). This operation generates an index report of similar media items in the database. The media item to be entered into the database is stored

along with similar media items, items of the same category (setting section configured to set a recommended category).].

“a registration section means for associating the multimedia object which is to be registered” [col. 32 l. 60-64, every media item (multimedia object) which is entered into the database (to be registered) is first used as target media item and searched against a data structure of feature vectors that represent the reference media items in the database.],

“the feature value calculated by the feature value calculation means” [col. 17 lines 59-65, feature vector(feature value) computation (calculation) step.],

“said registration section registering the multimedia object”[classifiers used in the database, col. 32 lines 59-67], and

“the feature value” “into the database” “[classifiers used in the database, col. 32 lines 59-67].

Bolle does not explicitly disclose “the recommended category is provided as an initial value of a registration category in a form of category selection list in which a recommended category is already selected and a not-recommended category is not selected, to a user for allowing the user to change the selection status of each category on the category selection list so as to determine the registration category of the multimedia object”, “the registration category determined by the user”, and “the registration category determined by the user into the database”.

On the other hand, since Kephart, abstract, discloses displaying, to the user, a representation of the one or more most likely categorical labels. Kephart further discloses discloses that these are a list of bestfolders, col. 8 line 34. Hence, because Kephart discloses that these lists of bestfolders (e.g. category selection list in which a recommended category is pre-selected and not recommended category is not selected), therefore Kephart suggests “the recommended category being provided to a user as an initial value of a registration category in a form of category selection list in which a recommended category is pre-selected and a not-recommended category is not selected”.

Because Kephart, abstract, discloses assisting a user with the task of categorizing a received electronic document into a collection and receiving data from the user, representative of a selected categorical label. Kephart further discloses, col. 8 lines 30-39, that the reader reads the message and data is received indicating that the user invoked the standard move to folder menu by clicking on the file button. That when this occurs the list best folders is prepended to the traditional alphabetic listing of folder names (i.e. user changes the selection status of each category on the category selection list). Kephart therefore suggests “allowing the user to change the selection status of each category on the category selection list so as to determine the registration category of the multimedia object to be registered”; “and the registration category determined by the user to register the multimedia object”; and “the registration category determined by the user into the database”.

Kephart further states that the electronic document can include audio or video files (i.e. multimedia objects).

Both systems are directed to categorizing multimedia objects into a database. It would have been obvious to a person of an ordinary skill in the art to apply Kephart's disclosure of displaying to the user a representation of the one or more most likely categorical labels and receiving from the user representative of a selected categorical label to the system of Bolle for the purpose of improving upon the need to more precisely assign a topic to the classified media element as disclosed in Bolle, col. 31 lines 32-37 by allowing the user to selectively choose a category for the media object thereby categorizing it to tailor more specifically to the user rather than the system.

Response to Arguments

9. Applicant's arguments filed 4/26/07 have been fully considered but they are not persuasive. Applicant's mainly assert the following (Lettered):

A. That Kephart does not disclose or suggest a pre-selected category as recited in claims 1, 11, and 12.

In response, the examiner respectfully disagrees with Applicants that Kephart does not disclose or suggest a pre-selected category. Kephart, abstract, discloses that the task of categorizing a received electronic document into a collection includes the steps of classifying the document to

obtain one or more most likely categorical labels and displaying, to the user, a representation of the one or more most likely categorical labels. To further clarify, the list of bestfolders are displayed to the user. That col. 8 lines 22-26, discloses when the user has displayed and read the message, the user may elect to click on one of the “move to” buttons to choose a selectedfolder into which she desires the message to be placed. Hence, Kephart suggests “a pre-selected category” as the displaying, to the user, a representation of the one or more most likely categorical labels.

B. That Kephart does not disclose or suggest the user changes the selected state of each category to finally determine a desired category as recited in independent claims 1, 11, and 12.

In response, the examiner respectfully disagrees with Applicants that Kephart does not disclose or suggest “the user changes the selected state of each category to finally determine a desired category”. Kephart discloses col. 8 lines 22-26 when the user may elect to click on one of the ‘move to’ buttons to choose selectedfolder into which she desires the message to be placed. Further disclosing col. 8 lines 35-38, that the list BestFolders Is prepended to the traditional alphabetic listing of folder names. This enables the user to quickly choose a SelectedFolder, causing data indicative of the selection to be received. Hence, Kephart discloses “the user changes the selected state of each category to finally determine a desired category” as the user may elect to click on one of the move to buttons to choose selectedfolder into which she desires the message to be placed. That is, the state of being pre-selected to being selected, if the move to

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button is selected. If the file button is selected, the pre-selected state changes to an unselected state, and user chooses from all the unselected states.

In summary, the Application as amended does not over come the cited prior art of reference.

Claims are still broad enough to read on the cited reference.

Conclusion

10. The prior art made of record listed on PTO-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924. The examiner can normally be reached on Monday - Friday 9am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Cam Y. Truong
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